

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

NETWORK-1 TECHNOLOGIES, INC.

Plaintiff,

vs.

ALCATEL-LUCENT USA INC., ET AL.,

Defendants.

CASE NO. 6:11-cv-492-RWS-KNM

JURY TRIAL DEMANDED

**Network-1 Technologies, Inc.'s
Opening Claim Construction Brief**

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Exhibits

Ex.	Title
1	United States Patent No. 6,218,930 (“Apparatus and method for remotely powering access equipment over a 10/100 switched Ethernet network”)
2	Reexamination I Certificate—United States Patent No. 6,218,930
3	Reexamination II Certificate—United States Patent No. 6,218,930
<i>Prior Markman Orders</i>	
4	<i>Markman</i> Order in <i>Network-1 v. D-Link</i> , Case No. 6:05-cv-291, Docket No. 137 (November 20, 2006)
5	<i>Markman</i> Order in <i>Network-1 v. Cisco Systems, Inc. et al</i> , 6:08-cv-30, Docket No. 251 (February 16, 2010)
<i>Prosecution History</i>	
<i>IPR2013-00071</i>	
6	Paper 1 (Petition for <i>Inter Partes</i> Review, December 5, 2012)
7	Paper 16 (Patent Owner’s Preliminary Response, March 12, 2013)
8	Paper 18 (Decision Instituting <i>Inter Partes</i> Review, May 24, 2013)
9	Paper 44 (Patent Owner Response, August 7, 2013)
10	Paper 103 (Final Written Decision, May 22, 2014)
11	Ex. 1011 (Zimmerman Declaration, December 3, 2012)
12	Ex. 2016 (Zimmerman Deposition, July 9, 2013)
<i>IPR2013-00092</i>	
13	Paper 1 (Petition for <i>Inter Partes</i> Review, December 19, 2012)
14	Paper 19 (Patent Owner’s Preliminary Response, March 20, 2013)
15	Paper 21 (Decision, May 24, 2013)
<i>IPR2013-00386</i>	
16	Paper 1 (Petition for <i>Inter Partes</i> Review) (June 24, 2013)
17	Exhibit 1005 (Thompson declaration) (June 24, 2013)
<i>IPR2013-00495</i>	
18	Paper 1 (Petition for <i>Inter Partes</i> Review, August 6, 2013)
19	Exhibit 1011 (Zimmerman Declaration, June 20, 2013)
<i>CBM2015-00078</i>	

20	Paper 1 (Petition for Cover Business Method Review, February 16, 2015)	
21	Exhibit 1004 (Thompson Declaration, February 16, 2015)	
Ex Parte Reexamination No. 90/012,401 (Reexamination I)		
22	Response to Office Action (July 25, 2014)	
23	Declaration of Dr. James Knox (July 21, 2014)	
24	Notice of Intent to Issue Reexamination Certificate (August 13, 2014)	
Ex Parte Reexamination No. 90/013,444 (Reexamination II)		
25	Response to Office Action (August 17, 2015)	
26	Declaration of Dr. James Knox (August 16, 2015)	
Extrinsic Evidence		
Dictionaries and treatises		
Ex.	Title	Terms
27	Webster’s Third New International of English Language Unabridged Dictionary (2002) at 1362 (“main” - “first in any respect ... principal”)	main power source
28	Microsoft Computer Dictionary, 5 th ed. (2002) <ul style="list-style-type: none">at 145 (“data switch” – “A device in a computer system that routes incoming data to various locations”);at 198 (“Ethernet” – “The IEEE 802.3 standard for contention networks”);at 505 (“Switching” – “A communications method that uses temporary rather than permanent connections to establish a link or to route information between two parties. In the dial-up telephone network, for example, a caller’s line goes to a switching center, where the actual connection is made to the called party. In computer networks, message switching and packet switching allow any two parties to exchange information. In both instances, messages are routed (switched) through intermediary stations that together serve to connect the sender and the receiver.”)	data node / adapted for data switching
29	McGraw Hill Computer Desktop Encyclopedia, 9 th ed. (2001) at 328 (“Ethernet” – “The most widely-used local area network (LAN) access method, defined by the IEEE as the 802.3 standard.”)	data node / adapted for data switching

30	<i>IEEE 802.3 Standard</i> (“This standard defines Ethernet local area, access and metropolitan networks.”)	data node
31	<i>Random House Webster’s Dictionary</i> , 4 th ed. (2001) at 648 (“secondary” – “second in order, rank, or time”)	secondary power source
31a	<i>Random House Webster’s Unabridged Dictionary</i> , 2 nd ed. (2001) at 1529 (“preselect” – “to select in advance; choose beforehand”)	preselected condition
32	<i>New Oxford American Dictionary</i> (2001) <ul style="list-style-type: none"> at 1347 (“preselect” – “select or set in advance”); at 1539 (“secondary” – “coming after ... something else that is primary”). 	secondary power source; preselected condition
33	<i>Switching-Mode Power Supply Design Tutorial Introduction</i> , Jerrold Foutz (“A power source might be the 60 Hz, single phase, 120 V ac power found in a home in the United States”)	secondary power source
<i>United States Patents</i>		
34	5,994,998 (“Power transfer apparatus for concurrently transmitting data and power over data wires”) (Fisher)	main power source
35	5,652,892 (“Method and apparatus for controlling remote power source”) (Ugajin)	secondary power source
36	5,937,201 (“Management system and method for parallel computer system”) (Matsushita)	secondary power source
37	6,535,983 (“System and method for signaling and detecting request for power over Ethernet”) (McCormick)	main power source
38	7,072,190 (“High efficiency power converter”) (Schlecht)	main power source
39	6,278,248 (“Brushless dc motor fan driving by an AC power source”) (Hong)	main power source
40	4,528,457 (“DC-AC converter for supplementing an AC power source”) (Keefe)	main power source
41	8,356,334 (“Data network node having enhanced security Features”) (Yik)	main power source
42	7,340,051 (“Power ramp-up in a line-powered network element system”) (Phillips)	Main power source
<i>Documentation</i>		
43	HP 1810 Switch Series Installation and Getting Started Guide	main power source
44	HP Series 2510 Switch Installation and Getting Started Guide	main power source
45	HP E3800 Switches Installation and Getting Started Guide	main power source
46	HP ProCurve Series 2600 Switches Installation and Getting Started Guide	main power source
47	Nortel Communication Server 1000E Overview	main power source
48	Cisco 10720 Internet Router AC and DC Power Supply Replacement Instructions (“Connect the router to the main	main power source

	power source” depicted as a wall outlet)	
49	Cisco 10720 Internet Router Installation and Configuration Guide (“Connect the router to the main power source” depicted as the wall outlet)	main power source

Declaration of Dr. James Knox

The ‘930 patent claims an invention fundamental to Ethernet switching. Recognizing the importance of the invention, 20 companies, including the largest player in the industry, have licensed the ‘930 patent resulting in royalties to date of about \$85 million, with ongoing royalties of about \$11 million per year. The ‘930 Patent has been subjected to five *Inter Partes* Reviews, a Covered Business Method review, a Federal Circuit appeal, and two reexaminations. The ‘930 claims survived all challenges.

The Court previously construed terms of the ‘930 Patent (Exs. 1, 2, 3) in *Network-1 v. D-Link*, 6:05-cv-291 (“*D-Link*” Ex. 4); and *Network-1 v. Cisco*, 6:08-cv-30 (“*Cisco*” Ex. 5).

Both sides agree that the Court should not be bound by the *D-Link* and *Cisco* constructions if the governing claim construction principles applied to the evidence establish that a different construction is correct, especially in light of the subsequent prosecution history. *Burns, Morris & Stewart Ltd. Partnership v. Masonite International Corp.*, 401 F. Supp. 2d 692, 697 (E.D. Tex. 2005) (previous constructions may be “instructive ... but they are not binding on this court”); see Defendants’ Motion to Stay Pending IPRs (Dkt. 374) at 10 (“The record from the two IPRs will simplify and clarify the claim construction process.”).

The claim language, specification, prosecution history, and expert testimony demonstrate that Plaintiff’s proposed constructions are correct and that Defendants’ are wrong.

1. “data node”

Network-1’s construction	Defendants’ construction
data switch or hub, such as an Ethernet switch	data switch or hub

The parties dispute whether a “data node,” when properly construed, includes “an Ethernet switch.” Because this issue is disputed, the Court should resolve it. *O2 Micro International Ltd. v. Beyond Innovation Technology Co., Ltd.*, 521 F.3d 1351, 1362 (Fed. Cir.

2008) (“When the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.”). Consistent with the understanding of one of ordinary skill the art (Knox decl. ¶¶14-17), the claim language and specification require that “data node” includes an Ethernet switch.

Claim language: Dependent claims confirm that an Ethernet switch is an example of, and therefore falls within the scope of, “data node,” *e.g.*, claim 10: “wherein said data node is an Ethernet switch.”

Specification: “[A] claim construction that excludes a preferred embodiment ... is rarely, if ever correct.” *Anchor Wall Systems, Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1308 (Fed. Cir. 2003) (internal quotes omitted). Excluding an Ethernet switch from the scope of “data node” excludes the preferred embodiment, in which an “Ethernet switch” is the claimed “data node.” ‘930, Fig. 3 (“Ethernet switches”); ‘930, 3:66-67 (“Ethernet switch 68”); 3:28-31 (“Ethernet 8 port switch”); *see also* ‘930 Title (“...Switched Ethernet Network”).¹

2. “adapted for data switching”

Network-1’s construction	Defendants’ construction
configured to route (switch) data from a sending device to one or more receiving devices addressed by the sending device, using temporary rather than permanent connections	configured to communicate data using temporary rather than permanent connections with other devices <u>or</u> to route data between devices

To be “adapted for data switching” requires both (a) data routing (switching) and (b) using temporary connections. Under Defendants’ construction, however, a device is adapted for data switching even if (a) the device is not configured to switch data between devices (so long as it communicates using temporary connections), or (b) the device does not use temporary

¹ The prosecution history also confirms that an Ethernet switch falls within the scope of “data node.” “Data node ... An example is the 8-port Ethernet switch in Figure 3.” Ex. 22 (Reexam I—Response) at 21-22.

connections (so long as the device routes data). The (a) claim language and structure, and (b) prosecution history confirm that Network-1's construction is correct and that Defendants' is wrong.

Claim language and structure: The ordinary meaning of “data switching” does not encompass all means for “communicating data.” Rather, “data switching” is performed by an intermediary device (the data node) that receives data from a sending device and routes (switches) that data to a receiving device addressed by the sending device using temporary connections:

switching *n.* A communications method that uses temporary rather than permanent connections to establish a link or to route information between two parties. In the dial-up telephone network, for example, a caller's line goes to a switching center, where the actual connection is made to the called party. In computer networks, message switching and packet switching allow any two parties to exchange information. In both instances, messages are routed (switched) through intermediary stations that together serve to connect the sender and the receiver.

Ex. 28 (Microsoft Computing Dictionary, 5th ed. (2002)) at 505.² Knox decl. ¶¶21-23. A device adapted for data switching is not merely a conduit with only “a single path” in and out; instead, it is configured to switch incoming data among alternate outgoing paths—*i.e.*, “data switching.” Knox decl. ¶29. A sending device addresses the data to a receiving device; the data switch receives the addressed data and switches or routes the data among alternate paths to the designated receiving address. Knox. decl. ¶¶21-23.³ Accordingly, a device merely “configured

² As reflected in the dictionary definition—“routed (switched)”—routing and switching in this context have the same meaning. Knox. decl. ¶21, fn.4.

³ For example, if data to be printed is routed from device A (*e.g.*, a computer) to device B (*e.g.*, a printer) through an intermediate station (switch), when the intermediate station receives data to be printed from device A, it does not decide which device should receive the data.

to communicate data” using temporary connections, as in Defendants’ proposal, would not be “adapted for data switching.”

Prosecution history: If a patentee clearly and unambiguously disclaims the claim scope of a phrase in the prosecution history, the construction of that phrase cannot include the disclaimed claim scope. “[B]y distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover.” *Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1373 (Fed. Cir. 2005) (internal quotes omitted)). The prosecution history includes the original examination of the patent and any statement made to the PTO in post-grant review proceedings. *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1384 (Fed. Cir. 2015); *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1366 (Fed. Cir. 2014) (“GBT clearly and unmistakably limited the term preamble ... [d]uring reexamination.”); *Krippelz v. Ford Motor Co.*, 667 F.3d 1261, 1267 (Fed. Cir. 2012); *see also* Dkt. 374 (Defendants’ Motion to Stay Pending IPR) at 10 (“statements made during reexamination become part of the prosecution history, which allows a full development of the intrinsic evidence to be considered by the Court”) (*quoting Spa Syspatronic, AG v. Verifone, Inc.*, 2008 WL 1886020, at *3 (E.D. Tex. Apr. 25, 2008)).

In the ‘930 prosecution history, the patentee distinguished prior art by unambiguously disavowing a device that is not “configured to route (switch) data from a sending device to one or more receiving devices addressed by the sending device, using temporary rather than permanent connections”:

Instead, it “routes” the data to the device (printer) addressed (identified) by device A (the sending device). Knox. decl. ¶¶21-23.

77. Consistent with the Board's construction of "a data node adapted for data switching" in *Sony III* (IPR2013-00091), "a data node adapted for data switching" in the context of the '930 patent would have been understood by one of ordinary skill in the art in the 1999 / 2000 timeframe to mean a data node (*i.e.*, a data switch or hub) configured to route (switch) data from a sending device to one or more receiving devices addressed by the sending device, using temporary rather than permanent connections.

Ex. 26 (Reexam II Knox Decl.) at ¶77); Ex. 25 (Reexam II Response) at 59.

- "A 'data node adapted for data switching' (a 'data switch') is a specific subset of 'data nodes' ... that automatically control not just the flow of data ... but also the route over which that data flows – 'route data between devices.'" (Ex. 23 (Reexam I Knox Decl.) at ¶28);
- "'data switching' involves routing (switching) data from a sending device ('sender') to a receiving device ('receiver') identified by the sending device ('sender')" (Ex. 25 (Reexam II Response) at 41);
- "Data switching requires the ability to switch data from one device connected to the data node to another device connected to the data node, which requires the ability to transfer data among the associated data ports in the node." (*Id.* at 40);
- "the 'intermediate stations' (data nodes) route (switch) the data to the receiving device addressed by the sending device." (*Id.* at 42);

see also Ex. 26 (Reexam II Knox Decl.) at ¶¶123, 172, 78, 82-83, 90-92, 95; Ex. 14 (IPR2013-00092 Preliminary Response) at 47 ("[M]essages are routed (switched) through intermediary stations") (*quoting* Ex. 28 at 505); Ex. 22 (Reexam I Response) at 15, 22.

The patentee distinguished prior art devices as "not adapted for data switching because ... they... have no ability to switch ... from one device connected to it to another device" (Ex. 25 (Reexam II Response) at 47), and no "ability to transfer data between and among the associated

data ports” (Ex. 26 (Reexam II Knox Decl.) ¶119). The patentee unambiguously disclaimed any interpretation of “data switching” that does not include routing (switching) data between two devices but instead is just a single path communication between two devices:

Woodmas does not disclose any device adapted for data switching. Providing a lone signaling path ... does not disclose switching anything, let alone data, between devices. The disclosed control station 14 has no ability to transfer data between and among undisclosed devices Accordingly, the control station 14 disclosed in Woodmas is not ‘adapted for data switching’ as required by the claim.

Ex. 14 (IPR2013-00092 Preliminary Response) at 48; Ex. 25 (Reexam II Response) at 78) (“Because a switch or hub ‘adapted for data switching’ routes / switches data between devices that are connected to a network, it does not include a single network card or network interface unit (as disclosed in Smith.)”); Ex. 22 (Reexam I Response) at 22 (“the bi-directional exchange of data between devices, without the ability to switch data between and among devices, does not disclose a ‘data node adapted for data switching’”).

Accordingly, Network-1 clearly disclaimed any interpretation of “data switching” that does not include the attributes of Network-1’s construction.

3. “main power source”

Network-1’s construction	Defendants’ construction
a source of power connected to supply power to the data node and deliver a low level current to the access device	a DC power source

The (a) claim language and claim structure, and (b) specification and prosecution history demonstrate that Network-1’s construction is correct and that Defendants’ is wrong.

A. Claim language and claim structure.

“There is a heavy presumption that claim terms are to be given their ordinary and customary meaning.” *Aventis Pharm. Inc. v. Amino Chemicals Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013). Defendants’ own expert confirmed that Network-1’s construction of “main power source” is exactly what “one of ordinary skill in the art [would] understand is the ordinary meaning of ‘main power source’”:

3 Q. What would one of ordinary skill in
4 the art understand is the ordinary meaning of “main power
5 source”?

6 A. And my answer remains that one would understand
7 it as the source of power that supplies both power to the
data node and the power for the low-level current.

Ex. 12 (Zimmerman depo. 114:2-8) (emphasis added); *id.* 113:15-20 (“Q. [W]hat is meant by the phrase “main power source”? What does that mean? A. It is a source of power that both supplies power to the data node and the is the source of the low-level current.”).

The phrase “main power source” includes two components: “main” and “power source.” Each is addressed in turn.

“power source” The ordinary meaning of “power source,” in the context of data networks such as Ethernet networks, is “a source of power”—that is, “a place or point from which power may be obtained”—and encompasses both AC and DC power sources. Knox decl. ¶¶33-47. At the time of the ‘930 invention, the phrase “power source” was regularly used in just this manner, as demonstrated by objective sources of ordinary meaning, such as the prior art. *Laryngeal Mask Co. Ltd. v. Ambu*, 618 F.3d 1367, 1373 (Fed. Cir. 2010) (“This prior art use of the term would further inform one of skill in the art as to the common meaning of the term...”); *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 (Fed. Cir. 1996) (“This prior art can often help to demonstrate how a disputed term is used by those skilled in the art ... [P]rior art

references may also be more indicative of what all those skilled in the art generally believe a certain term means.”). For example, Defendants’ primary power-over-Ethernet prior art reference equates “power source” with a “source of power”

Various embodiments of the invention use different external power sources 150: such as, a computer’s power supply, a battery, or a wall outlet and adaptor. What is important, however, is that there is some source of power.

Ex. 34 (Fisher) at 3:39-44 (emphasis added).

And Defendants’ prior art references use the term “power source” to encompass both AC and DC power sources:

- “a power source, such as a wall socket [AC] or a battery [DC]” Ex. 34, 1:17-18; Ex. 37, 1:8-19 (same);
- “the power source 108 includes a direct current (DC) and/or an alternating current (AC) power source such as a battery and/or a connection the main power grid,” Ex. 42, 4:49-52.

Because the ordinary meaning of “power source” included both AC and DC power sources, patent applications intended to be limited their inventions to one or the other expressly claimed “AC” or “DC” power sources. *See, e.g.*, Ex. 38, 17:21-23 (“DC power source”); Ex. 39, 4:24-26 (“an alternating current power source”); Ex 40,

What is claimed is:

1. A power converter system comprising:
a **DC power source**;

1. A brushless direct current motor fan driven by **an alternating current power source**, the brushless direct current motor fan comprising:

1. A DC-AC converter for supplying power from a **DC power source** to supplement a load circuit that is also supplied power by an **AC power source**, comprising:

10:1-4 (“DC power source” and “AC power source”).⁴ The independent claims of the ‘930

⁴ Moreover, the meaning of “power source” has not changed in the time since the invention. And Defendants’ documents relating to Ethernet switches (the exact context of ‘930 Patent) confirm that the ordinary meaning of “power source” includes an AC power source. *See, e.g.*, Ex. 44 (HP 2510) at 2-14 (“Connect the Switch to a Power Source ... into a nearby AC

patent have no such “AC” or “DC” limitation.

“main” Because Defendants’ proposed construction of “main power source” as “DC power source” does not construe the words “power source,” Defendants necessarily construe the remaining word—“main”—to mean “DC.” No person of ordinary skill in the art would suggest that the ordinary meaning of “main” means “DC” in the context of the ‘930 patent (or in any context). Knox decl. ¶¶44-46. There is “no technical (or other) dictionary, treatise, or textbook suggesting that ‘main’ connotes or is synonymous with ‘DC.’” Knox decl. ¶46. “DC” refers to “a completely different concept: ‘direct current,’ which is the unidirectional flow of an electric charge.” Knox decl. ¶45.

Instead, “main” connotes “first or principal,” as in the “first or principal functions of the power source.” Knox decl. ¶45; *see* Ex. 27 (Webster’s Dictionary) at 1362 (“main ... first in any respect ... principal”); Ex. 12 (Defendants’ expert) at 112:6-25 (“the first one that’s applied”).

The structure of the claims also confirms that “main” in this context means first or principal because the “main power source” is paired with a “secondary power source,” and, as demonstrated in Section 4 below, “secondary” in this context means second in time or sequence. In addition, the claims recite a main operating mode in which the “main power source” performs two functions: “a main power source connected to supply power to the data node, ... delivering a low level current from said main power source to the access device.” ‘930, claim 6; Knox ¶36. “These two main functions ... take place ... before an access device that can receive remote power is detected.” Knox ¶36. After detection, the claimed “secondary power source” may commence its function—“to supply power from the data node via said data signaling pair to the

power source”); Ex. 44 (HP 2510) at 1-7 (“Switches ... are powered on when connected to an active AC power source”); Ex. 49 (Cisco 10720) at 5-46 (characterizing an AC power outlet as “the main power source”); *see also* Knox decl. ¶43 (and exhibits referenced in this paragraph).

access device.” ‘930, claim 6.⁵

Defendants’ own proposed construction of the parallel phrase “secondary power source” also demonstrates that “main power source” is not limited to a “DC power source.” Defendants construe “secondary power source” by [1] construing “power source” as “a source of power,” and [2] incorporating the claimed secondary function in the construction. The relevant portions of the constructions are as follows:

Term	Network-1	Defendants
main power source	[1] a source of power [2] connected to supply power to the data node and deliver a low level current to the access device	a DC power source
secondary power source	[1] a source of power [2] connected to provide power from the data node to the access device using the data signaling pair...	[1] a source of power [2] connected to provide power between the data node and the access device using the data signaling pair ...

There is no reasonable basis for using two inconsistent approaches to construe the two parallel phrases “main power source” and “secondary power source” in the same claim. Knox decl. ¶38.

Accordingly, the ordinary meaning of “main power source” in the context of the ‘930 claims is “a source of power connected to supply power to the data node and deliver a low level current to the access device.” Knox decl. ¶¶33-38.

B. Specification and prosecution history.

The specification and prosecution history also demonstrate that “main power source” is not limited to a “DC power source.” “Absent a clear disavowal or contrary definition in the

⁵ As Dr. Knox explained: “The ‘930 patent claims, and the ‘930 specification describes, two states or modes in which the claimed invention operates. Initially, power is applied to the data node to begin executing its primary functions as an Ethernet switch or hub (‘a main power source connected to supply power to the data node’). The data node also begins looking for remote devices that may require remote power (‘delivering a low level current from said main power source’). Subsequently, if the data node detects a device that can receive remote power, additional power will be sourced to operate the access devices (‘controlling power supplied by said secondary power source to said access device’).” Knox ¶36 n.8.

specification or the prosecution history, the patentee is entitled to the full scope of its claim language.” *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004). Nothing in the specification or prosecution history (1) defines “main power source” as a “DC power source,” or (2) disavows the full scope of the phrase.

The ‘930 specification never even mentions a DC power source that supplies power to the data node or that delivers a low level current (as required by the claims), let alone requires a DC source. In fact, the only references to “DC” are to the dc resistive termination and the dc-dc switching supply both found in the exemplary remote equipment (*i.e.*, in the access device not the data node). ‘930, 3:4-7; 3:12-13 (“dc-dc-switching supply in the remote equipment”).⁶ Accordingly, the construction of “main power source” is governed by its ordinary meaning in the context of the ‘930 claims, which, as demonstrated above, is Network-1’s proposal.

4. “secondary power source”

Network-1’s construction	Defendants’ construction
a source of power connected to provide power <u>from</u> the data node <u>to</u> the access device using the data signaling pair; the secondary power source <u>can be the same source of power as the main power source</u>	a source of power connected to provide power <u>between</u> the data node <u>and</u> the access device using the data signaling pair; the secondary power source <u>is physically separate from the main power source</u>

Both sides’ constructions restate “power source” as “source of power” and then identify the function of the “secondary power source.” The parties’ proposals raise two disputes:

- (1) whether the construction should track the actual claim language “from ... to”

⁶ The power source 16 depicted in Figure 1 and the main power supply 70 depicted in Figure 3 can provide either AC or DC power. Knox Decl. ¶¶48, 49. Moreover, had any disclosed embodiment of the ‘930 Patent expressly depicted the “main power source” as a DC power source, it would have still been inappropriate to limit “main power source” to a DC power source because “[t]his court has cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.” *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1303 (Fed. Cir. 2007) (internal quotes omitted).

- (Network-1) or instead should be rewritten as “between ... and” (Defendants); and
- (2) whether the secondary power source “can be the same source of power” as the main power source (Network-1), or whether the secondary power source must be “physically separate from” the main power source (Defendants).

A. Dispute 1: “from ... to” / “between ... and”

The actual claim language is “from ... to” rather than “between ... and.” ‘930, claims 6, 20, 21, and 22. Defendants have not identified what they intend to do by altering the claim language—perhaps to erroneously suggest that power may be transmitted from the access device to the data node rather than from the data node to the access device. Knox decl. ¶53. There is no basis for replacing the actual words used in the claims—“from ... to”—with the alternative words proposed by Defendants—“between ... and.” See *Int’l Rectifier Corp. v. IXYS Corp.*, 361 F.3d 1363, 1374 (Fed. Cir. 2004) (“the district court’s adoption of ... a synonym of the claim term, disregards entirely the distinction between the two terms”).

B. Dispute 2: The “secondary power source” need not be physically separate from the “main power source.” Knox. decl. ¶¶54-68.

Claim language: “There is a heavy presumption that claim terms are to be given their ordinary and customary meaning.” *Aventis Pharm. Inc. v. Amino Chemicals Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013). The ordinary meaning of “secondary power source” does not require physical separation. Rather, “secondary” in this context means after in time or sequence. Ex. 31 (Random House Webster’s Dictionary 648 (4th ed. 1991) (“secondary—second in order, rank, or time”); Ex. 32 (New Oxford American Dictionary 1539 (2001) (“coming after ... something else that is primary”); Knox ¶55. Both sides’ constructions include this concept of “secondary” by including the claimed function—“provide power from the data node to the access device using the data signaling pair”—that “is second in ... time” and “com[es] after” the main power source

functions. *See* ‘930, claim 6.⁷

The independent claims do not include any language that restricts the configuration or placement of the “secondary power source” that performs this secondary function and do not include any limitations on the physical relationship between the “main power source” and the “secondary power source.” Rather, the claims require that the “secondary power source” perform a single secondary function—provide power to the access device. *See* claim 6. By using the modifiers “main” and “secondary” (rather than first/second), the claims are drafted such that the “main power source” and the “secondary power source” may be the same, different, or overlapping, as long as they perform their respective functions.⁸ *Linear Tech. Corp. v. International Trade Comm’n*, 566 F.3d 1049, 1055 (Fed. Cir. 2009) (“[N]othing in the claim language or specification ... supports narrowly construing the terms to require a specific structural requirement or entirely distinct ‘second’ and ‘third’ circuits. Rather, the ‘second’ and ‘third’ circuits must only perform their stated functions.”); *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 422 F. Supp. 2d 446, 457 (D. Del. 2006) (“While the claim language does require the secondary voltage to be generated by the secondary voltage source, there is no requirement that the secondary voltage source be distinct from the source of the primary voltage.”), *aff. in part, rev. in part on other grounds*, 711 F.3d 1348 (Fed. Cir. 2013).

Defendants’ position is directly contrary to their own expert’s opinion. Defendants’ expert confirmed that one of ordinary skill in the art would understand that, as used in the ‘930

⁷ An acceptable alternative construction of “secondary power source” that even more explicitly incorporates the “secondary” concept would be “a source of power that begins supplying power after the main power source begins supplying power and is connected to provide power from the data node to the access device using the data signaling pair.”

⁸ Had the claims been drafted differently, *e.g.*, “a secondary power source, physically separate from the main power source, arranged to supply power to the data node,” then the plain language of the claim would require the “secondary source to be physically separate.” The claims do not include such language and, as a result, there is no such requirement.

patent, the phrase “secondary power source” means a source that can be “the same as the main power source.”

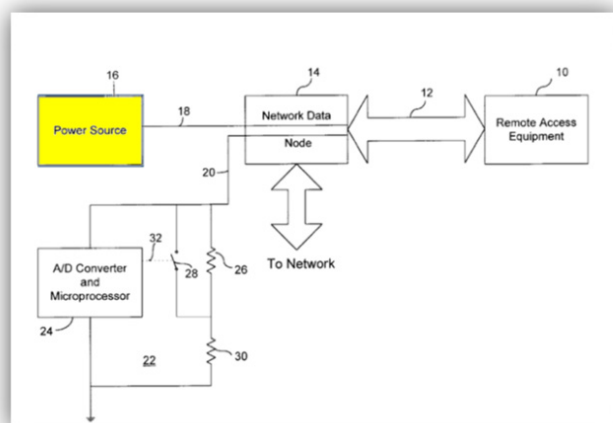
11 What would one of ordinary skill in the art
 12 understand the phrase “secondary power source” to mean,
 13 as it’s used in the claims of the ‘930 patent?
 14 A. And as I had mentioned before, that's one of
 15 those things that there’s not a lot of detail on.
 16 One would understand it as a -- as an
 17 alternative source of power which may be from the -- may
 18 be derived from or the same as the main power source and
 19 is responsible for the power that follows on after this
 20 low-level-current-voltage-sensing step.

Ex. 12 (Zimmerman depo.) 114:11-20 (emphasis added).

Defendants’ proposed limitation requires importing (from some unspecified source) limitations that do not correspond to any words in the claims.

Specification: The specification does not define “secondary power source” as being physically separate from the “main power source” or disavow a “secondary power source” that is not physically separate from the “main power source.” Rather, the specification does the opposite.

The preferred embodiment in the specification uses a single power source as both the “main power source” and the “secondary power source” as illustrated in Figure 1. Knox decl. ¶¶58-63. The ‘930 Patent describes Figure 1 as “a simplified schematic diagram of the remote power



automatic detection system of the present invention” (‘930, 2:21-22, emphasis added) and “the preferred embodiment” (‘930, 2:33-3:28). It further describes the single power source 16 as

being “in accordance with the present invention.” ‘930 2:52-54 (“In accordance with the present invention, a power source 16...”). That single power source performs both the main functions and secondary function because it is arranged to supply power to the data node, deliver a low level current to the access device, and provide power from the data node to the access device. Knox decl. ¶¶60-61, 65. As the Patent Trial and Appeal Board confirmed in holding that the “secondary power source” and “main power source” need not be “physically separate devices,” “Figure 1 of the Specification also depicts a single ‘power source 16.’” Ex. 15 (Decision) at 14 (citing ‘930, 2:52-57).

Therefore, the specification does not disclaim a device with a single power source that performs all power functions. Instead, it expressly states that a single power source is “the preferred embodiment” in “accordance with the present invention.” Accordingly, Defendants’ construction would improperly exclude the preferred embodiment.⁹

Prosecution history: Nothing in the prosecution history disavows a “secondary power source” that is not physically separate from the “main power source.” Rather, the prosecution history confirms the opposite.

If a patent owner assents to a claim construction during earlier litigation, and that construction is then provided to the PTO during a post-grant review of the patent, and the patent owner “never notified the PTO that it sought a meaning of [the term] that was different,” these circumstances “constitute disclaimer” and “a clear and unmistakable assertion by the patentee to

⁹ In the *Cisco* litigation, the defendants relied on Figure 3 as support for separate main and secondary power sources. Figure 3, however, does not disclose separate power sources. Knox decl. ¶¶64, 68. Moreover, had any particular embodiment of the ‘930 Patent expressly depicted a physically separate “main power source” and “secondary power source,” it would still be improper to require separate power sources in claims that lack such a limitation because “[t]his court has cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.” *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1303 (Fed. Cir. 2007) (internal quotes omitted).

the PTO of the meaning and scope of the term.” *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1366 (Fed. Cir. 2014).

In the IPR proceedings, Patent Owner’s prior litigation construction was submitted to the PTO’s Patent Trial and Appeal Board, and the Board took notice (when finding that the power sources need not be “physically separate devices”) “that Patent Owner took the position in litigations ... that the ‘main power source’ and ‘secondary power source’ in claim 6 need not be physically separate devices,” and that the Patent Owner “d[id] not challenge” that interpretation. Ex. 15 (IPR Decision) 13. Accordingly, this constitutes “a clear and unmistakable assertion by the patentee to the PTO of the meaning and scope of the term.” *Golden Bridge*, 758 F.3d at 1366.

* * *

The claim language, specification, and prosecution history all confirm that Network-1’s proposed construction is correct and Defendants’ construction is wrong.

5. “low level current”

Network-1’s construction	Defendants’ construction
a current at a level that is sufficiently low that, by itself, it will not operate the access device; a data signal is not a low level current	a current sufficient to cause the access device to start up, but not sufficient to sustain the start up

There are two disputes here:

- (1) whether the boundary level that defines a “low level current” is:
 - “sufficiently low that, by itself, it will not operate the access device” (Network-1); or
 - “sufficient to cause the access device to start up, but not sufficient to sustain the start up” (Defendants).
- (2) whether “low level current” encompasses a data signal.

A. The boundary for “low level current” proposed by Network-1 is correct.

Claim language and specification: The meaning of words of degree or relative terms—such as the word “low” in the phrase “low level current”—depends on identifying a standard for measuring that degree. *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015) (“When a word of degree is used, the court must determine whether the patent provides some standard for measuring that degree.” (internal quotations omitted)), *cert. denied*, 136 S. Ct. 569 (2015). Accordingly, relative terms are construed so as to define the degree necessary “to serve the inventor’s purposes.” *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 450 (Fed. Cir. 1986); *see also* Ex. 8 (IPR Decision) at 8-10 (the PTAB set forth case law regarding construing relative terms and, based on that case law, construed “low level current” as current that is “sufficiently low that, by itself, it will not operate the access device”). To accomplish the inventors’ purpose, a “low level current” is a level that is not, by itself, sufficient to operate the access device.¹⁰

The specification explains that it is “an object of the invention to provide methods and apparatus for reliably determining if a remote piece of equipment is capable of accepting remote power.” ‘930, 1:41-43; 1:54-56. This was because “[t]he invention of the ‘930 patent arises in a network environment that includes both devices that can accept remote power and devices that cannot.” Knox decl. ¶74. “The problem with traditional PoE systems is that damage can occur when power is delivered to an access device that is not designed to accept it.” *Id.*; Ex. 4 (*D-Link*

¹⁰ Because the relative term “low” in “low level current” can be fully defined by establishing an upper boundary—*i.e.*, a level low enough to qualify as being at a “low level”—defining that upper boundary is sufficient. Moreover, other limitations in the claim impose a lower boundary for the “low level current.” For example, claim 6 requires “sensing a voltage level on the data signaling pair in response to the low level current.” If the detection current were at a level insufficient to generate a voltage level on the data signaling pair that could be sensed, a resulting voltage level on the data signaling pair could not be sensed as required by the claim. Accordingly, other claim limitations require a lower boundary that the detection current be sufficient to generate a voltage level on the data signaling pair that can be sensed.

Markman) at 1; Ex. 5 (*Cisco Markman*) at 1. Accordingly, the inventors sought a method that would “withhold sending operating power through a network cable until a determination had been made that a device attached to the cable was capable of accepting remote power.” Knox Decl. ¶76.

The invented method was for “automatically determining if remote equipment is capable of remote power feed and if it is determined that the remote equipment is able to accept power remotely then to provide power.” ‘930, 1:14-18 (emphasis added). The automatic determining is “accomplished by delivering a low level current.” ‘930, 2:66-3:1. Operating power is provided only “if it is determined,” using the low level detection current that the device “is able to accept power remotely.” ‘930, 1:14-18. Delivering a detection current at a level sufficient to operate the access device would defeat the inventors’ purpose of “determining whether the remote equipment is capable of accepting remote power” before sending operating power. ‘930, 1:54-56. Accordingly, to serve the inventor’s purpose, a “low level current” must be a current that is sufficiently low that, by itself, it will not operate the access device. *See* Ex. 8 (IPR Decision) at 8 (“The Specification therefore indicates that the ‘low level current’ is sufficiently low that, by itself, it will not operate the access device.”).

Prosecution history: The prosecution history controls the construction of a claim term when the patentee has made a clear and unambiguous disavowal of claim scope. *Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1306 (Fed. Cir. 2007); *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013) (“Prosecution history disclaimer plays an important role in the patent system.”). A term that is defined during prosecution can also define and limit the scope of a term. *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1366 (Fed. Cir. 2014); *Saffran v. Johnson & Johnson*, 712 F.3d 549, 559 (Fed. Cir. 2013); *Lennon Image Technologies, LLC v. Macy’s Inc.*, 2:13-CV-235-JRG, 2014 WL 3830136, 2 (E.D.

Tex. Aug. 1, 2014) (“a patent applicant may ... define a term in prosecuting the patent”) (*quoting Home Diagnostics, Inc., v. Lifescan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004)).

In construing “low level current” in the IPRs, the Board (a) considered the purpose of the ‘930 invention (“to provide power to a remote device once it is determined that the device is capable of being powered remotely”), (b) considered the benchmark standard in the specification for measuring the “low level current” (“the device does not operate based on just the low level current used for detection, but does operate when the power is increased by a certain amount”), and (c) concluded “the ‘low level current’ is sufficiently low that, by itself, it will not operate the access device.” Ex. 15 (IPR Decision) at 9. In the IPRs, Network-1 applied this construction of “low level current” to distinguish the prior art: “the claimed ‘low level current’ must be below a threshold level such that it would not, by itself, operate the access device.” Ex. 9 (Response) at 2. “Matsuno does not disclose ... that the current generated from the 48 volts is insufficient to operate the access devices.” *Id.* at 4. This prosecution history constitutes an unambiguous disclaimer.

In addition, Network-1 submitted that definition of “low level current” from the IPR in a reexamination proceeding, thereby expressly confirming the meaning of “low level current”: Network-1 “defines ‘low level current’ as a current that is sufficiently low that, by itself, it will not operate the access device.” Ex. 24 (Reexam I NIRC) at 2. Under controlling Federal Circuit law, when a patentee in a reexamination submits a claim term definition and manifests agreement with it, that definition is binding in any subsequent litigation. *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1366 (Fed. Cir. 2014) (“This is a clear and unmistakable assertion by the patentee to the PTO of the meaning and scope of the term.”).

B. Defendants’ upper and lower boundaries for “low level current” are wrong.

Defendants’ construction—“a current sufficient to cause the access device to start up, but

not sufficient to sustain the start up”—is derived from the following statement in the prosecution history: “The varying level is created by the remote power supply beginning to start up but the low current level is unable to sustain the start up.” ‘930, 3:14-16. Defendants’ approach to construing “low level current” fails for four reasons.

Reason 1: Defendants’ construction is not based on the degree necessary “to serve the inventor’s purposes.” *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443, 450 (Fed. Cir. 1986). As set forth above, the purpose of the “low level current” is to “reliably determin[e] if a remote piece of equipment is capable of accepting remote power” and then deliver operating power only to those devices that are “capable of accepting remote power.” ‘930, 1:41-44. The purpose of the low level current is not “starting up an access device,” even if that start up is not sustained. Indeed, that would run counter to the purpose. Moreover, the specification expressly states that it is not until after the low level current has completed detection and operating power is supplied to the access device that it “turns on” and “becomes active”:

When the cycle is confirmed [i.e., after the low level current has been used to detect a device that is capable of accepting remote power], switch S1 is closed which increases the power output to the remote equipment. When the power to the remote equipment reaches the proper level the remote power supply turns on and the remote equipment becomes active.

‘930, 3:17-22.

Reason 2: The specification passage that Defendants rely on describes a particular embodiment, and it is improper to import the particular features of an embodiment into the claims. “The patentee is entitled to the full scope of his claims, and we will not limit him to his preferred embodiment or import a limitation from the specification into the claims.” *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009). Moreover, the specification passage does not even purport to address the relevant question, *i.e.*, the purpose of the “low level

current.” Rather, the passage describes the effect of a “low level current” in a preferred embodiment on a “dc-dc switching supply in the remote equipment.” ‘930, 3:12-16; Knox decl. ¶84. The effect on a dc-dc switching supply cannot limit the claims because it is only described in a preferred embodiment: “[t]he dc-dc switching supply [is an] attempt[] to adopt the preferred embodiment’s limitations into the claim construction.” Ex. 4 (*D-Link*) at 9-10, 13.

Reason 3: Defendants’ proposal is not even supported by the specification passage it is derived from:

description in preferred embodiment	Defendants’ construction
“The varying level is created by the [1] remote power supply [2] beginning to start up but the low current level is unable to sustain the start up.” (‘930, 3:14-16)	a current sufficient to cause the [1] access device to [2] start up, but not sufficient to sustain the start up

[1] While the specification statement is a description of an effect on a “power supply” (a component within the access device), Defendants twist this into an effect on the entire “access device.” Knox decl. ¶85.

[2] While the specification states that the dc-dc power supply is “beginning to start up,” Defendants eliminate “beginning” and convert this passage into causing the access device to actually “start up.”

In fact, this specification embodiment passage teaches nothing about the access device starting up (or even beginning to start up) in response to the low level current. As explained above, the specification states that “it is not until switch 28 is closed and, as a result, operating power is supplied to the remote equipment (not when the ‘low level current’ is delivered before switch 28 is closed),” Knox ¶85, that the access device first “turns on” and “becomes active.” ‘930, 3:17-22. Accordingly, this specification passage says nothing about the access device starting up.

Reason 4: Defendants’ boundaries are contrary to express statements in the prosecution history. As explained above, the prosecution history includes both a clear disavowal and definition that a “low level current” is insufficient to operate the access device: Disavowal: “Matsuno does not disclose ... that the current ...is insufficient to operate the access devices.” Ex. 9 (Response) at 4. Definition: “[Network-1] defines ‘low level current’ as a current that is sufficiently low that, by itself, it will not operate the access device.” Ex. 24 (Reexam I NIRC) at 2. To the extent Defendants’ construction requires the access device to operate (*i.e.*, start up), it is precluded by this prosecution history.

C. A data signal is not a “low level current”

Claim language and specification: The ordinary meaning of “current,” in the context of the phrase “low level current” and the ‘930 Patent, does not encompass a data signal. While a “current” when supplied at a sufficient level is used for powering, a “data signal” is used to “convey information.” Knox decl. ¶¶91. The claimed invention requires a “current” that is “deliver[ed] ... from said main power source” at a “low level” to produce “a voltage level on the data signaling pair.” ‘930, claim 6. In the context of the claim language and the specification, a “low level current” is “too low to operate the access device,” but it is “otherwise arranged so as to participate in the process of operating the device and, if the current level were sufficiently increased, it would operate the device.” Knox decl. ¶¶84-85. This is precisely what is depicted in “the preferred embodiment” in Figure 1. Knox decl. ¶¶61-62. By contrast, “increasing the magnitude of data signals” (*e.g.*, a series of pulses) “would not power ... the access device.” Knox decl. ¶¶88-91.

Prosecution history: If a patentee clearly and unambiguously disclaims the claim scope of a phrase in a reexamination, the construction of that phrase cannot include the disclaimed claim scope. *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1366 (Fed. Cir. 2014)

(“GBT clearly and unmistakably limited the term ‘preamble’ ... [d]uring reexamination.”). In distinguishing various references in the reexamination, the patentee clearly disclaimed the scope of “low level current” to exclude a “data signal.” The patentee described a prior art data signal as being “in stark contrast” to and “a very different approach” than using the claimed “low level current” for detection:

As a result, in stark contrast to the claimed invention of using a ‘low level current’ for detection, the prior art in the field (and even post-art in the period following Katzenberg’s invention) used a very different approach. This other art taught using a data signal (something designed to contain information), rather than a ‘low level current,’ for detection. Examples of such data signals are the ‘discovery tone’ or bit pattern disclosed in a contemporaneous reference ... and the ‘timing signal’ of one of Avaya’s reference. ... Rather than detecting based on signals that carry data, the Katzenberg invention used a novel ‘current’ approach to detection.

Ex. 7 (IPR2013-00071 Paper 16—Preliminary Response) at 9-10 (emphasis added); *see id.* at 10 (the “data signal mode of thinking in the prior art taught sharply away from” the low level current approach). Network-1’s assertions that using a data signal was “in stark contrast” to, “a very different approach” than, and “taught sharply away from” using a low level current is a clear and unambiguous disavowal. Accordingly, the construction of “low level current” must exclude a data signal.

6. “preselected condition”

Network-1’s construction	Defendants’ construction
<u>Proposal 1</u> : any condition of the sensed voltage level, selected in advance of the sensing	a condition of the sensed voltage level that indicates whether a power supply of the access device begins to start up but is unable to sustain the start up
<u>Proposal 2</u> : any condition of the sensed voltage level that indicates whether an access device is capable of accepting remote power	

Network-1 proposes three alternative constructions.¹¹ Network-1’s first proposal—“any condition of the sensed voltage level, selected in advance of the sensing”—best reflects the ordinary meaning of the phrase “preselected condition” in the context of the ‘930 claims. Knox decl. ¶95.

Claim language: Network-1’s first proposal recites the ordinary meaning of the claim language as the phrase is used in the claims.

“condition” The claims expressly recite that the claimed “condition” is a condition of the sensed voltage level: “preselected condition of said voltage level.” See, e.g., claim 6, element [d]; Knox decl. ¶95.

“preselected” The ordinary meaning of “preselected” is “selected in advance.” Knox decl. ¶95; Ex. 32 (The New Oxford American Dictionary (2001) at 1347 (“preselect – select or set in advance”); Ex. 31a (Random

House Webster’s Unabridged Dictionary 2nd Ed. (2001) at 1529 (“preselect – to select in advance;

sensing a voltage level on the data signaling pair in response to the low level current, and controlling power supplied by said secondary power source to said access device in response to a preselected condition of said voltage level.

choose beforehand”)). Moreover, the claim identifies when the selection takes place, that is, what the selection must be in advance of. Because it is “a preselected condition of said voltage level” where “said voltage level” is the voltage level resulting from “sensing a voltage level” in the preceding claim step, the preselection must take place in advance of the sensing of the voltage level. Knox decl. ¶95.

As a result, “preselected condition” should be construed as “any condition of the sensed

¹¹ The third proposed construction—“preselected parameter of the voltage on the signaling pair that indicates whether an access device is able to accept remote power from the data node”—is the Court’s prior construction and could be adopted for the same reasons articulated by the Court. Ex. 4 (*D-Link*) at 18; Ex. 5 (*Cisco*) at 17.

voltage level, selected in advance of the sensing.”

Defendants’ proposed construction has no relationship to the actual words in the claim language. Defendants’ proposal acknowledges that the phrase concerns a “condition of the sensed voltage” but Defendants entirely omit the concept of “preselected,” i.e. that the condition is selected in advance of the sensing. Moreover, nothing in the words “preselected condition” or the rest of the claim connotes anything about the remaining concepts in Defendants’ proposal: “a power supply of the access device begins to start up but is unable to sustain the start up.”

Specification: Defendants’ construction imports limitations from a specific exemplary embodiment. “[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”

Phillips v. AWH Corp., 415 F.3d 1303, 1323 (Fed. Cir. 2005). Defendants’ construction improperly imports limitations from the preferred embodiment and thereby limits “preselected condition” to the preferred embodiment.

There are many aspects of any given access device that might be considered when selecting a “preselected condition” to be used to determine whether “a remote piece of equipment is capable of accepting remote power”—to “differentiate those access device that are capable of accepting power over Ethernet from those access devices that cannot.” Knox decl.

¶¶100-101; ‘930; 3:3-22; 1:41-43. A preselected condition can be “any condition that differentiates access devices that are capable of accepting remote power from ones that are not.” Knox decl. ¶¶100-101. Defendants’ construction improperly attempts to impose the “illustrative examples” as limitations on the “preselected condition”—examples which are but one embodiment. Knox decl. ¶102. In particular, Defendants’ construction improperly imports the specific effect of a low level current, connected in a specific manner, on a specific dc-dc switching supply, within a specific access device disclosed in the preferred embodiment:

If a varying voltage level is detected, this identifies the presence of dc-dc switching supply in the remote equipment. The varying level is created by the remote power supply beginning to start up but the low current level is unable to sustain the start up.

‘930, 3:12-16. This concept of the dc-dc power supply of an access device beginning to start up but being unable to sustain the start up is found only in the description of the preferred embodiment. ‘930, 2:33-34; 3:2-22. The dc-dc switching supply is illustrative. ‘930, 3:12-16; Ex. 4 (*D-Link*) at 9-10, 13 (“the dc-dc switching supply [is an] attempt[] to adopt the preferred embodiment’s limitations into the claim construction”). The claim language itself does not recite an access device power supply, much less the illustrative dc-dc switching power supply. Moreover, nothing in the claims, specification, or prosecution history redefine “preselected” to mean “that indicates whether a power supply of the access device begins to start up but is unable to sustain the start up.”

7. “from said main power source” / “from a main power source”

Network-1’s construction	Defendants’ construction
no construction necessary	supplied by a main power source

This phrase should not be construed as “supplied by a main power source” but instead should be given the full scope of its ordinary meaning for two reasons. Knox decl. ¶¶107-111.

Reason 1: Jurors know the meaning of “from ... to” and can readily apply that meaning in the context of “from said main power source to the access device.” Defendants do not identify any ambiguity in “from ... to” that requires construction, and no other words could more accurately describe the claimed concept. Therefore, no construction of the phrase is necessary or

appropriate.¹² *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1326 (Fed. Cir. 2012) (“The district court did not err in concluding that these terms have plain meanings that do not require additional construction.”).

Reason 2: Defendants’ construction—“supplied by”—could be inappropriately applied in ways that are different than the ordinary meaning of “from.” Knox. decl. ¶¶110. For example, substituting “supplied by” for “from” in a specification passage relating to the flow of current changes the meaning of the statement:

A return path ~~from~~ [supplied by] remote access equipment 10 is connected through a lead 20 to an automatic remote power detector, shown generally as 22.

‘930, 2:57-59. The “from” clause identifies the device where the return path returns from (a “return path from remote access equipment 10”). Substituting “supplied by” changes the meaning so that it no longer identifies an origin point of the path, but instead identifies a device that “supplies” the path. Knox decl. ¶¶111-112.

“From ... to” is used in the ‘930 claims to identify where a current is provided from and not necessarily what “supplies” the current. Knox decl. ¶¶111-112. A recent *Markman* Order from this district addressing this same concept of “from ... to” is instructive:

Thus, ‘from’ is used in context of where the data is transmitted from (transmitting from point A to point B) not what creates the data. In such context, the claim is directed to the point from which data is transmitted, not the particular way or place data is created. Thus, because of the clear context of the claims themselves no further construction of ‘data from an information source’ is required. ... Google’s arguments that ‘from’ requires details of creation or origin are explicitly rejected. ... The Court finds that ‘data from an information source’ does not need further construction other than the constructions of ‘data’ and ‘information source’ provided elsewhere herein.’

SimpleAir v. Google, *Markman* Order, 2:14-cv-00011, Dkt. 107 at 16 (E.D. Tex. April 27, 2015).

¹² The construction of “main power source” and “access device” in the claim language “from said main power source to the access device” are addressed separately.

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/s/ Sean Luner